

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A base station comprising:

an attaching unit configured to attach a request value to a packet received from a core network based on a quality of service (QoS) class for the packet in the core network, wherein the attaching includes attaching, to the received packet, a request value for communication quality corresponding to a high priority class as a target value for communication quality used by the base station to perform transmission control when the QoS class for the received packet is a high priority class, and not attaching a request value to the received packet when the QoS class for the received packet is a low priority class;

a packet classification unit configured to classify each packet received/transmitted from/to a plurality of mobile stations into a quantitative guarantee type packet having a request value, which indicates a quantitative value for communication quality, included in the quantitative guarantee type packet or a relative guarantee type packet not having a request value included in or attributed to the relative guarantee type packet when the relative guarantee type packet is received and classified or classified and transmitted, the request value indicating a quantitative value for communication quality;

a quantitative guarantee type buffer configured to store quantitative guarantee type packets received/transmitted from/to the plurality of mobile stations;

a relative guarantee type buffer configured to store relative guarantee type packets received/transmitted from/to the plurality of mobile stations;

a transmission order controller configured to control a transmission order of the packets for every classified quantitative guarantee type packet in the quantitative guarantee type buffer and every classified relative guarantee type packet in the relative guarantee type buffer, the transmission order of each quantitative guarantee type packet in the quantitative

guarantee type buffer being based on a corresponding quantitative value and independent of a respective mobile station from/to which the packet is received/transmitted;

a radio resource assignment unit configured to assign radio resources to the quantitative guarantee type packets in the quantitative guarantee type buffer and the relative guarantee type packets in the relative guarantee type buffer, according to the transmission order controlled by the transmission order controller, wherein if radio resources still remain after assignment to the quantitative guarantee type packets in the quantitative guarantee type buffer, the radio resource assignment unit assigns remaining radio resources to the relative guarantee type packets in the relative guarantee type buffer;

a plurality of quantitative guarantee type transmission buffers configured to store quantitative guarantee type packets awaiting transmission; and

a measurement unit configured to measure a transmission rate of the quantitative guarantee type packets transmitted from the quantitative guarantee type transmission buffers for each request value for each quantitative guarantee type packet in a unit time by the radio resource assignment unit as an average transfer speed wherein

the transmission order controller compares the request value with the average transfer speed and controls the transmission order based on a result of the comparison, and

the packet classification unit restrains storing a quantitative guarantee type packet in one of the plurality of quantitative guarantee type transmission buffers when the average transfer speed is more than a corresponding request value.

2. (Previously Presented) The base station of claim 1, wherein the transmission order controller gives priority to the quantitative guarantee type packets over the relative guarantee type packets, in the transmission order.

3. (Original) The base station of claim 1, wherein the transmission order controller controls the transmission order based on a quality of service class.

4. (Previously Presented) The base station of claim 1, wherein the transmission order controller controls the transmission order of relative guarantee type packets based on radio quality between the base station and a corresponding one of the plurality of mobile stations.

5. (Previously Presented) The base station of claim 1, wherein the transmission order controller controls a transmission order of a plurality of quantitative guarantee type packets having the same request value, such that communication quality for the request value becomes the same, among a plurality of mobile stations receiving/transmitting the quantitative guarantee type packets.

6-7. (Canceled)

8. (Original) The base station of claim 1, wherein the transmission order controller controls the transmission order such that a number of the quantitative guarantee type packets transmitted in unit time becomes equal to a number of packets satisfying the request value.

9. (Canceled)

10. (Previously Presented) The base station of claim 1, wherein the radio resource assignment unit assigns the radio resources to the quantitative guarantee type packets based on the request value.

11. (Canceled)

12. (Previously Presented) The base station of claim 1, wherein  
the packet classification unit classifies the packet having the request value attached thereto into the quantitative guarantee type packet, and classifies a packet not having a request value attached thereto into the relative guarantee type packet.

13. (Original) The base station of claim 1, further comprising:  
a determination unit configured to determine a quality of service class in a core network for a packet, which has been received from a mobile station and is to be transmitted to the core network, based on whether the packet is the quantitative guarantee type packet or the relative guarantee type packet.

14. (Previously Presented) A radio communication system comprising:

a plurality of mobile stations; and

a base station comprising:

an attaching unit configured to attach a request value to a packet received from a core network based on a quality of service (QoS) class for the packet in the core network, wherein the attaching includes attaching, to the received packet, a request value for communication quality corresponding to a high priority class as a target value for communication quality used by the base station to perform transmission control when the QoS class for the received packet is a high priority class, and not attaching a request value to the received packet when the QoS class for the received packet is a low priority class;

a packet classification unit configured to classify each packet received/transmitted from/to the plurality of mobile stations into a quantitative guarantee type packet having a request value, which indicates a quantitative value for communication quality, included in the quantitative guarantee type packet or a relative guarantee type packet not having a request value included in or attributed to the relative guarantee type packet when the relative guarantee type packet is received and classified or classified and transmitted, the request value indicating a quantitative value for communication quality;

a quantitative guarantee type buffer configured to store quantitative guarantee type packets received/transmitted from/to the plurality of mobile stations;

a relative guarantee type buffer configured to store relative guarantee type packets received/transmitted from/to the plurality of mobile stations;

a transmission order controller configured to control a transmission order of the packets for every classified quantitative guarantee type packet in the quantitative guarantee type buffer and every classified relative guarantee type packet in the relative guarantee type buffer, the transmission order of each quantitative guarantee type packet in the quantitative guarantee type buffer being based on a corresponding quantitative value and independent of a respective mobile station from/to which the packet is received/transmitted;

a radio resource assignment unit configured to assign radio resources to the quantitative guarantee type packets in the quantitative guarantee type buffer and the relative guarantee type packets in the relative guarantee type buffer, according to the transmission order controlled by the transmission order controller;

wherein if radio resources still remain after assignment to the quantitative guarantee type packets in the quantitative guarantee type buffer, the radio resource

assignment unit assigns remaining radio resources to the relative guarantee type packets in the relative guarantee type buffer;

a plurality of quantitative guarantee type transmission buffers configured to store quantitative guarantee type packets awaiting transmission; and

a measurement unit configured to measure a transmission rate of the quantitative guarantee type packets transmitted from the quantitative guarantee type transmission buffers for each request value for each quantitative guarantee type packet in a unit time by the radio resource assignment unit as an average transfer speed, wherein

the transmission order controller compares the request value with the average transfer speed and controls the transmission order based on a result of the comparison, and

the packet classification unit restrains storing a quantitative guarantee type packet in one of the plurality of quantitative guarantee type transmission buffers when the average transfer speed more than a corresponding request value.

15. (Previously Presented) A communication method comprising:

attaching a request value to a packet received from a core network based on a quality of service (QoS) class for the packet in the core network, wherein the attaching includes attaching, to the received packet, a request value for communication quality corresponding to a high priority class as a target value for communication quality used by the base station to perform transmission control when the QoS class for the received packet is a high priority class, and not attaching a request value to the received packet when the QoS class for the received packet is a low priority class;

classifying each packet received/transmitted from/to a plurality of mobile stations into a quantitative guarantee type packet having a request value, which indicates a quantitative value for communication quality, included in the quantitative guarantee type packet or a relative guarantee type packet not having a request value included in or attributed to the relative guarantee type packet when the relative guarantee type packet is received and classified or classified and transmitted, the request value indicating a quantitative value for communication quality;

controlling a transmission order of the packets for every classified quantitative guarantee type packet and every classified relative guarantee type packet by the base station, the transmission order of each quantitative guarantee type packet in the quantitative guarantee type buffer being based on a corresponding quantitative value and independent of a respective mobile station from/to which the packet is received/transmitted;

assigning radio resources to the quantitative guarantee type packet and the relative guarantee type packet, according to the transmission order controlled in the controlling step,

wherein if radio resources still remain after assignment to the quantitative guarantee type packets in the quantitative guarantee type buffer, assigning, in the assigning step, remaining radio resources to the relative guarantee type packets in the relative guarantee type buffer;

storing quantitative guarantee type packets awaiting transmission in a plurality of quantitative guarantee type transmission buffers

measuring a transmission rate of the quantitative guarantee type packets transmitted from the quantitative guarantee type transmission buffers for each request value for each quantitative guarantee type packet in a unit time by the radio resource assignment unit as an average transfer speed;

comparing the request value with the average transfer speed and controls the transmission order based on a result of the comparison; and

restraining from storing a quantitative guarantee type packet in one of the plurality of quantitative guarantee type transmission buffers when the average transfer speed is more than a corresponding request value.

16. (Previously Presented) The base station of claim 1, wherein the packet classification unit classifies the packet into a quantitative guarantee type packet having a request value for communication quality that is not a QoS class.

17. (Previously Presented) The base station of claim 16, wherein the packet classification unit classifies the packets into a quantitative guarantee type packet having a request value for at least one of a specific quantity of at least one of a transfer speed, a transfer delay or jitter.

18. (Currently Amended) The ~~base station~~ radio communication system of claim 14, wherein the packet classification unit classifies the packet into a quantitative guarantee type packet having a request value for communication quality that is not a QoS class.

19. (Currently Amended) The ~~base station~~ radio communication system of claim 18, wherein the packet classification unit classifies the packets into a quantitative guarantee type packet having a request value for at least one of a specific quantity of at least one of a transfer speed, a transfer delay or jitter.



20. (Previously Presented) The method of claim 15, wherein the classifying comprises classifying a packet into the quantitative guarantee type packet having a request value for communication quality that is not a QoS class.

21. (Canceled)

22. (Previously Presented) The base station of claim 1, wherein if radio resources still remain after assignment to the relative guarantee type packets, the radio resource assignment unit assigns the further remaining radio resources to the quantitative guarantee type packets further remaining in the quantitative guarantee type buffer.

23. (Canceled)

24. (Previously Presented) The ~~base station~~ radio communication system of claim 14, wherein if radio resources still remain after assignment to the relative guarantee type packets, the radio resource assignment unit assigns the further remaining radio resources to the quantitative guarantee type packet further remaining in the quantitative guarantee type buffer.

25. (Canceled)

26. (Previously Presented) The method of claim 15, wherein if radio resources still remain after assignment to the relative guarantee type packet, assigning the further remaining radio resources to the quantitative guarantee type packet further remaining in the quantitative guarantee type buffer.